

*THIS OPINION WAS NOT WRITTEN FOR PUBLICATION*

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* FRANK TOPPO

---

Appeal No. 1996-2920  
Application 08/238,214<sup>1</sup>

---

ON BRIEF

---

Before WINTERS, GRON and OWENS, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This is an appeal from the examiner's final rejection of claims 9-12, which are all of the claims

---

<sup>1</sup> Application for patent filed May 3, 1994.

Appeal No. 1996-2920  
Application 08/238,214

remaining in the application.

### *THE INVENTION*

Appellant claims a method for raising the level of high density cholesterol and reducing the level of low density cholesterol in a human subject. Claim 9 is illustrative and reads as follows:

9. A method of raising the level of high density cholesterol and reducing the level of low density cholesterol in a human subject comprising administering to said subject between about 50 milligrams and about 1000 milligrams of trans-resveratrol daily.

### *THE REFERENCES*

#### *References applied in the rejection*

Chemical Abstract 103:70127r (CA '127) (Sep. 2, 1985), abstract of Japanese Kokai Tokkyo Koho JP 60-9455, Jan. 18, 1985.

Chemical Abstract 116: 254401a (CA '401) (June 22, 1992), abstract of E.H. Siemann and L.L. Creasy, "Concentration of the Phytoalexin Resveratrol in Wine", 43 *Am. J. Enol. Vitic.* 49-52 (1992).

#### *Additional references addressed by appellant and the examiner*

E.H. Siemann and L.L. Creasy (Siemann), "Concentration of the Phytoalexin Resveratrol in Wine", 43 *Am. J. Enol. Vitic.* 49-52 (1992).

Martine Seigneur et al. (Seigneur), "Effect of the Consumption of Alcohol, White Wine, and Red Wine on Platelet Function and Serum Lipids", 5 *J. Appl. Cardiol.* 215-22 (1990).

Hideko Arichi et al. (Arichi), "Effects of Stilbene Components of the Roots of *Polygonum cuspidatum* Sieb. et Zucc. on Lipid Metabolism", 30 *Chem. Pharm. Bull.* 1766-70 (1982).

*THE REJECTION*

Claims 9-12 stand rejected under 35 U.S.C. § 103 as being unpatentable over appellant's admission at page 2, lines 17-22, of the specification in view of CA '401 and CA '127.

*OPINION*

We have carefully considered all of the arguments advanced by appellant and the examiner and agree with appellant that the aforementioned rejection is not well founded. Accordingly, we reverse this rejection.

The admission relied upon by the examiner is the following (specification, page 2, lines 17-22):

Epidemeologists have observed that individuals who drank a half liter of red wine per day significantly increased their blood levels of HDL. White wine has no such effects. The main difference between red and white wines is that red wine is fermented along with the grape skins, while white wine is not.

CA '401 discloses:

Resveratrol is a phytoalexin found in grapes. Recent research had shown that orally administered resveratrol lowered lipid levels in the liver of rats. Wine had been shown to lower serum lipid levels in humans. . . . Anal. of wines indicated that resveratrol may be the active ingredient in wines causing redn. of serum lipids.

CA '127 discloses that extracts from certain Polygonum plants contain resveratrol and, as health food additives, decrease serum lipids and enhance metabolic activity of the liver.

The examiner argues that 1) appellant admits on page 2 of the specification that orally administered red wine was known to increase HDL levels in blood, 2) CA '401 discloses that

resveratrol was known to be a constituent of grapes and suggests that resveratrol is the ingredient in wine which causes a reduction in serum lipids, and 3) CA '127 discloses that beneficial effects of trans-resveratrol on blood lipids were known in the art (answer, pages 2-3). The examiner concludes (answer, page 3):

One of ordinary skill in the art would have been motivated to employ trans-resveratrol in methods of treating humans to raise HDL and reduce LDL, by any conventional mode of administration, since the compound was known to be a consistent [sic, constituent] of wine, and oral administration of the same compound was known to produce the claimed effects in animal hosts, on its own, as well as in wine. The optimization of amounts of ingredients to be administered is considered within the skill of the artisan, absent evidence to the contrary.

The examiner's statement that "oral administration of the same compound was known to produce the claimed effects in animal hosts" does not appear to be supported by the evidence relied upon by the examiner. The examiner has not explained, and it is not apparent, why one of ordinary skill in the art, given that something in red wine increases blood levels of HDL-cholesterol and that resveratrol may cause a reduction of serum lipids, would have concluded that administering trans-resveratrol would increase HDL-cholesterol and lower LDL-cholesterol.

The examiner argues that the prior art administration of trans-resveratrol in red wine inherently would have increased HDL-cholesterol and lowered LDL-cholesterol (answer, page 3). When an examiner relies upon a theory of inherency, "the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily*

flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Int. 1990). The examiner has not established that the prior art consumption of a half liter of red wine per day would provide about 50 milligrams to about 1000 milligrams of trans-resveratrol as recited in appellants’ claim 9. In the declarations of Toppo (page 3) and Kashyap (page 4) (both filed on June 30, 1995; paper no. 9), it is explained that Siemann and Seigneur indicate that a person consuming of a half liter of red wine per day would consume only about 0.3 milligram of trans-resveratrol daily, and the examiner has not presented any evidence to the contrary.

For the above reasons, the examiner has not established a *prima facie* case of obviousness based upon the evidence relied upon in the rejection.

The examiner and appellant also address Siemann, Seigneur and Arichi. For the following reasons, even if these references are considered, the examiner has not established a *prima facie* case of obviousness.

The examiner argues that Siemann discloses that the lipid lowering and HDL elevating effects of trans-resveratrol were known in the art (answer, page 4). The portions of Siemann relied upon by the examiner are Siemann’s statements (page 49) that Seigneur discloses that consumption of red wine increases HDL-cholesterol and that Arichi found that resveratrol lowered lipids in rats with hyperlipemia.

Contrary to the examiner’s argument, Siemann does not state that Seigneur discloses that trans-

resveratrol increases HDL-cholesterol, and we do not find such a disclosure in Seigneur. Our review of Seigneur indicates that the reference teaches (pages 218 and 220) that consumption of red wine increases HDL-cholesterol, and that the reference does not identify any constituent of red wine which causes that increase.

The examiner argues that Arichi (page 1768, tables I-a and I-b) shows that resveratrol increases HDL-cholesterol and lowers LDL-cholesterol (answer, pages 4-5). The tables of Arichi relied upon by the examiner, however, show that the changes in HDL-cholesterol and LDL-cholesterol produced by administering resveratrol were not significant. Thus, these tables do not appear to support the examiner's argument (answer, page 5) that Arichi would have motivated one of ordinary skill in the art to use higher doses of resveratrol to produce a greater effect.

Appeal No. 1996-2920  
Application 08/238,214

*DECISION*

The rejection of claims 9-12 under 35 U.S.C. § 103 over appellant's admission at page 2, lines 17-22 of the specification in view of CA '401 and CA '127 is reversed.

*REVERSED*

SHERMAN D. WINTERS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
TEDDY S. GRON	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
TERRY J. OWENS	)	
Administrative Patent Judge	)	

Appeal No. 1996-2920  
Application 08/238,214

Charles H. Thomas  
4201 Long Beach Blvd.  
Ste. 405  
Long Beach, CA 90807